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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,683	09/15/2003	Melvin E. Wolfe JR.	28076/SV1094	9788

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EXAMINER

PHAN, THIEM D

ART UNIT PAPER NUMBER

3729

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/09/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/662,683

Applicant(s)

WOLFE ET AL.

Examiner

Tim Phan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-19 and 33-43 is/are pending in the application.
- 4a) Of the above claim(s) 33-43 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on 10/30/06 has been fully considered and made of record.
2. The rejection of claims 11-19 which were rejected in Office Action mailed on 7/24/06 under 35 USC 103; these claims are rejected under 35 USC 103 herein for substantially the same reasons as provided in the previous Office Action which is incorporated herein and made a part hereof.

Response to Arguments

3. Applicants' arguments filed 10/30/06 have been fully considered but they are not persuasive for the following reasons:

Applicants' arguments about the efficiency of the claimed invention (Remarks, page 7, last paragraph) and its superiority to others (Remarks, page 8, 1st paragraph) fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references of Sunaga et al in view of Matsuoka et al.

In response to applicants' arguments (Remarks, page 8, 2nd paragraph) that the examiner's conclusion of obviousness is based upon improper hindsight reasoning where the examiner cites

no reference that discloses the claimed element of “connecting an end portion of the first magnet wire directly to the switch” (Claim 11, line 6), it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Especially with respect to the prior art Matsuoka et al and Sunaga et al, Matsuoka et al teach the main, critical steps of the claimed invention of “laying a first wire (Fig. 3, 16) connection to an exit terminal and an input terminal (Fig. 3, 4 & 50) on a fuse (Fig. 3, 10); severing the first wire (Fig. 4, 16) between the input terminal and the exit terminal on the fuse” in order to efficiently mount a fuse at an intermediate portion of an existing circuit or connection (Col. 1, lines (Figs. 3 & 3, 10; col. 1, lines 41 & 42, lines 52-54), while Sunaga et al teach an existing circuit or connection between an end portion of the first magnet wire to the switch (Fig. 1, 41; col. 4, lines 24-27) by having the magnet wire terminated on circuit track of PCB, which connects to the switch for changing the current direction to the coils; it is therefore unbelievable to claim that an end portion of a magnet wire directly connected to a switch is patentably different from an end portion of a magnet wire connected to a switch through track signal on PCB as applicants insist that “electrically direct connection” is different from “electrically indirect connection through circuit track layout on PCB” and require proof for that evidence (Remarks, page 8, 2nd paragraph). Fortunately, any basic circuit network equation (Ohm's law) of a track signal of 0 resistance/impedance by wiring/track or any simple PCB

layout, which is designed to replace the cumbersome direct wiring connection of a prototype circuit built on a testing breadboard, is more than enough proof for any ordinary skill in the art to simply see that there is no basic, circuit-wise difference between an “electrically direct wire connection” and an “electrically indirect connection through circuit track layout on PCB”.

The remainder of the claims, i.e. Claims 12-19, stand rejected with the reasoning for their rejections carefully articulated in the previous Office Action and in view of the responses in the paragraphs above.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

THIS ACTION IS MADE FINAL. Applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee

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pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim Phan whose telephone number is 571-272-4568. The examiner can normally be reached on M & Tu, 6AM - 2PM, and W & Th, 9AM – 5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tim Phan
Examiner
Art Unit 3729



A. DEXTER TUGBANG
PRIMARY EXAMINER

tp
January 3, 2007